INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP99/06791

A. CLASSIFICATION OF SUBJECT MATTER Int.Cl ⁷ C22C38/12, 38/14			
C21D 8/02, 9/46			
According to International Patent Classificati n (IPC) or t both national classificati n and IPC			
B. FIELDS SEARCHED			
Minimum documentation searched (classification system followed by classification symbols) Int.Cl ⁷ C22C38/00-38/60 C21D 8/00-8/04, 9/46-9/48			
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched			
Jitsuyo Shinan Koho 1926-1996 Toroku Jitsuyo Shinan Koho 1994-2000 Kokai Jitsuyo Shinan Koho 1971-2000 Jitsuyo Shinan Toroku Koho 1996-2000			
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) WPI			
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C. DOCUMENTS CONSIDERED TO BE RELEVANT			
Category*	Citation of document, with indication, where ap		Relevant to claim No.
Y	<pre>JP, 63-243225, A (Nisshin Steel 11 October, 1988(11.110.88),</pre>	Co., Ltd.),	1-27,
	Claim 3, Example, Table 1 (Fami	ly: none) "	
Y	JP, 62-185834, A (Nisshin Steel 09 March, 1994 (09.03.94),		1-27
	Claim 1; Tables 1-4 (Family:		·
A	JP, 6-41683, A (Kawasaki Steel 15 February, 1994 (15.02.94) & EP, 565066, A & US, 53606		1-27
Y	JP, 7-48649, A (NKK CORPORATION), 21 February, 1995 (21.02.95), Claims 1 to 3; Examples 1-2		1-27
А	JP, 9-235650, A (Kawasaki Steel Corporation), 09 September, 1997 (09.09.97) & EP, 792942, A & US, 5853659, A		1-27
 			
Further documents are listed in the continuation of Box C. See patent family annex.			
"A" Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international filing		"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention document of particular relevance; the claimed invention cannot be	
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)		considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is	
"O" document referring to an oral disclosure, use, exhibition or other combined with one or more of means "P" document published prior to the international filing date but later than the priority date claimed combination or other combined with one or more of combined with one			documents, such skilled in the art
Date of the actual completion of the international search 29 February, 1999 (29.02.99) Date of mailing of the international search report 14 March, 2000 (14.03.00)			
Name and mailing address of the ISA/ Japanese Patent Office		Authorized officer	
Facsimile No.		Telephone No.	